

B2092A

TRUTH

User's manual

GB

Version 1.2 September 2006



www.behringer.com



TRUTH B2092A

IMPORTANT SAFETY INSTRUCTIONS



To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside; refer servicing to qualified personnel only.

To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus should never be exposed to dripping or splashing fluids, and no objects filled with liquids, such as vases, should be placed on the apparatus.



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure—voltage that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.



WARNING
THIS EQUIPMENT IS CAPABLE
OF DELIVERING SOUND
PRESSURE LEVELS IN EXCESS
OF 90 dB, WHICH
MAY CAUSE PERMANENT
HEARING DAMAGE.



TRUTH

High-Performance Active 360-Watt Studio Subwoofer for Mono, Stereo and Surround Applications

GB

- ▲ High-power 360-Watt amplifier delivers extreme dynamic range, with linear bass reproduction down to 32 Hz
- ▲ 2 long-excursion 8" loudspeakers with deformation-resistant aluminum die-cast chassis for minimal distortion even at highest volume levels
- ▲ Dedicated Left, Right and Center XLR inputs and outputs for all stereo and surround applications
- ▲ Incredible low-frequency enhancement for BEHRINGER TRUTH studio monitors or any other professional monitoring system
- ▲ Innovative band-pass filter enclosure design yields excellent dynamic response and linearity
- ▲ Active crossovers at 80 Hz provide precise frequency band separation and minimal phase shift
- ▲ Overload-protection circuitry ensures optimal speaker protection
- ▲ Flexible adaptation to virtually every acoustic environment via Phase and Room Compensation controls
- ▲ Footswitch connector for remotely controllable A/B comparison (footswitch not included)
- ▲ High-performance toroidal transformer for highest power handling and lowest noise
- ▲ High-quality components and exceptionally rugged construction ensure long life
- ▲ Conceived and designed by BEHRINGER Germany

B2092A

FOREWORD



Dear customer,

Welcome to the team of BEHRINGER users, and thank you very much for expressing your confidence in us by purchasing this studio subwoofer.

Writing this foreword for you gives me great pleasure, because it represents the culmination of many months of hard work delivered by our engineering team to achieve a very ambitious goal: to present a compact subwoofer that perfectly complements every loud-

speaker system with its enormous acoustic pressure and well-defined reproduction of the lowest frequencies. The task of designing our new TRUTH B2092A certainly meant a great deal of responsibility, which we assumed by focusing on you, the discerning user and musician. Meeting your expectations also meant a lot of work and night shifts. But it was fun, too. Developing a product usually brings a lot of people together, and what a great feeling it is when all who participated in such a project can be proud of what they've achieved.

It is our philosophy to share our enjoyment with you, because you are the most important member of the BEHRINGER team. With your highly competent suggestions for new products you've made a significant contribution to shaping our company and making it successful. In return, we guarantee you uncompromising quality as well as excellent technical and audio properties at an extremely reasonable price. All of this will enable you to give free rein to your creativity without being hampered by budget constraints.

We are often asked how we manage to produce such high-quality devices at such unbelievably low prices. The answer is quite simple: it's you, our customers! Many satisfied customers mean large sales volumes enabling us to get better purchasing terms for components, etc. Isn't it only fair to pass this benefit on to you? Because we know that your success is our success too!

I would like to thank all of you who have made the TRUTH possible. You have all made your own personal contributions, from the developers to the many other employees at this company, and to you, the BEHRINGER user.

My friends, it's been worth the effort!

Thank you very much,

Uli Behringer

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1. INTRODUCTION

Congratulations! By purchasing the TRUTH B2092A, you have obtained a powerful active subwoofer that effectively expands the transmission range of your stereo or surround system. You now own a tool that lets you reproduce the deepest bass frequencies with outstanding clarity.

The TRUTH B2092A is a compact subwoofer capable of reproducing bass frequencies down to 32 Hz. The band pass enclosure design with two long-stroke 8" loudspeakers guarantees the highest signal level with the lowest non-linear distortion possible. The integrated electronics include active crossovers, an overload-protection circuit and a powerful 360-Watt amplifier that delivers clearly defined bass even at high volumes. The B2092A features 3 signal inputs and outputs (left/center/right) as well as a separate subwoofer input. They assure flexible connectivity options for existing monitoring systems, regardless of whether they are in stereo or surround sound. The input sensitivity can be adjusted; and you can optimally adjust the B2092A to the main speakers and the acoustic surroundings by using the multistage room and phase compensation.



ATTENTION!



1.1 Before you get started

1.1.1 Shipment

Your B2092A was carefully packed in the factory to guarantee safe transport. Nevertheless, we recommend that you carefully examine the packaging and its contents for any signs of physical damage that may have occurred during transit.



1.1.2 Initial operation

Please make sure the unit is provided with sufficient ventilation, and never place the B2092A on top of an amplifier or in the vicinity of a heater to avoid the risk of overheating.



The fuse compartment near the power plug socket contains three triangular markings. Two of these triangles are opposite one another. The voltage indicated adjacent to these markings is the voltage to which your unit has been set up, and can be altered by rotating the fuse compartment by 180°.



Power is delivered via the cable enclosed with the unit. All required safety precautions have been adhered to.



1.1.3 Online registration

Please do remember to register your new BEHRINGER equipment right after your purchase by visiting www.behringer.com (alternatively www.behringer.de) and kindly read the terms and conditions of our warranty carefully.

Should your BEHRINGER product malfunction, our goal is to have it repaired as quickly as possible. To arrange for warranty service, please contact the retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may directly contact one of our subsidiaries. Corresponding contact information is included in the original equipment packaging (Global Contact Information/European Contact Information). Should your country not be listed, please contact the distributor nearest you. A list of distributors can be found in the support area of our website (www.behringer.com).

Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently.

Thank you for your cooperation!



2. CONTROL ELEMENTS AND CONNECTIONS

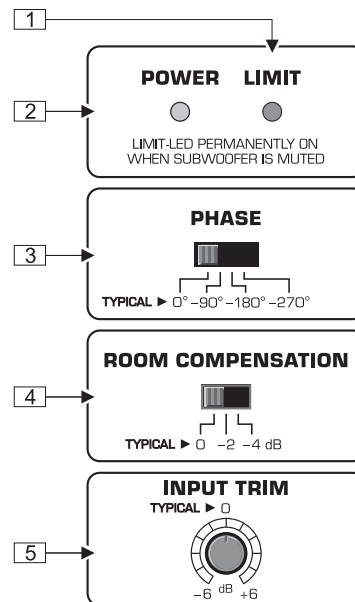


Fig. 2.1: Control elements in the back

- 1 The *LIMIT* LED lights up as soon as one of the built-in overload circuits becomes engaged. If the B2092A is muted using a footswitch, this LED is permanently lit.
- 2 *POWER*. This LED indicates that the loudspeaker is turned on.
- 3 Use the *PHASE* switch to to modify the B2092A's phasing (0°/-90°/-180°/-270°) in respect to the main speakers (also see ch. 3.3.2).
- 4 *ROOM COMPENSATION* (function for compensating for different room characteristics). Using this switch, you can optimize your B2092A for each installation location (ch. 3.3.1).
- 5 Use the *INPUT TRIM* control to adjust the input sensitivity.

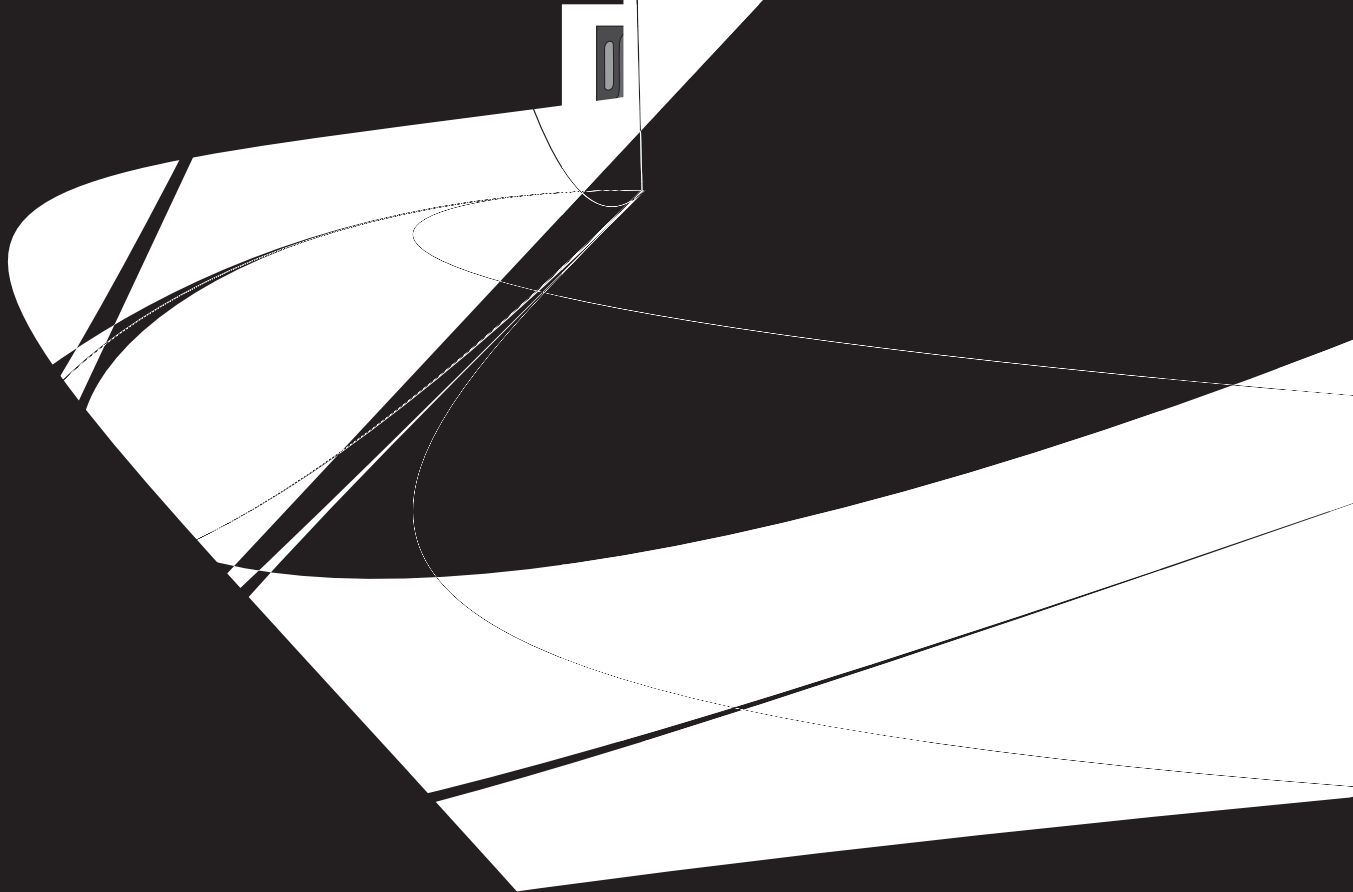


Fig. 2.2: The B2092A conn

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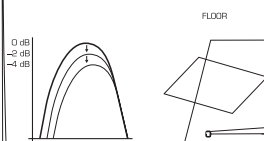
TRUTH B2092A

making any changes, and then using the controls to finetune the settings, creating the best results possible. Therefore, first set the controls to the neutral position labeled TYPICAL, i.e. set PHASE to 0° and ROOM COMPENSATION to 0 dB.

Start by placing the subwoofer roughly in the stereo center of your loudspeaker system. If the frequency response is not well-balanced, move the subwoofer to the left or to the right, so that it excites different room modes. Also, experiment with different distances to the wall and to the room's corners. If you place the subwoofer in a corner, the bass level will be increased, changing the overall settings. When selecting a location for your subwoofer, make sure that the openings in the back of your B2092A are not covered.

The stereo/front loudspeakers should be placed symmetrically with the same distance to the listening position. Correct placement of near-field monitors is explained in detail in the TRUTH B2030A/B2031A user's manual and in the TRUTH B2030P/B2031P handbook.

3.3.1 Adjusting room compensation





5. SPECIFICATIONS

Inputs	Left, Center, Right, Sub
Connectors	XLR connector, balanced inputs
Input Trim	±6 dB
Input impedance	10 kΩ (balanced)
Outputs	Left, Center, Right
Connectors	XLR, balanced
Output impedance	100 Ω
2 Woofers	Ø 8" (210 mm)
Nominal impedance	8 Ω
Power rating	max. 360 Watt (63 Hz / 0,3 % THD)
Noise	>100 dB
Subsonic filter	33 Hz (18 dB/Oct.)
High-cut filter	85 Hz (24 dB/Oct.)
PHASE switch	0°/90°/180°/270° @ 80 Hz
Frequency response	32 Hz to 80 Hz (+/-3 dB)
Frequency range	28 to 100 Hz (-10 dB)
Sound pressure level	max. 117 dB SPL @ 1 m
Voltage	USA/Canada 120 V~, 60 Hz Europe/U.K./Australia 230 V~, 50 Hz China/Korea 220 V~, 50 Hz Japan 100 V~, 50/60 Hz General export model 120/230 V~, 50/60 Hz
Power consumption	5 A @ 120 V, 3 A @ 230 V 100 - 120 V~: 250 V 200 - 240 V~: 250 V
Mains connection	Standard IEC connector
Dimensions (H x W x D)	24.4" x 12.8" x 22.9" (620 mm x 325 mm x 582 mm)
Weight	73 lbs (33.1 kg)

BEHRINGER is constantly striving to maintain the highest professional standards. As a result of these efforts, modifications may be made from time to time to existing products without prior notice. Specifications and appearance may differ from those listed or illustrated.

6. WARRANTY

1. This warranty does not exclude or limit the buyer's statutory rights provided by national law, in particular, any such rights against the seller that arise from a legally effective purchase contract.

2. The warranty regulations mentioned herein are applicable unless they constitute an infringement of national warranty law.

Please do remember to register your new BEHRINGER equipment right after your purchase by visiting www.behringer.com (alternatively www.behringer.de) and kindly read the terms and conditions of our warranty carefully. Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently. Thank you for your cooperation!

1. BEHRINGER (BEHRINGER International GmbH including all BEHRINGER subsidiaries listed on the enclosed page, except BEHRINGER Japan) warrants the mechanical and electronic components of this product to be free of defects in material and workmanship for a period of one (1) year* from the original date of purchase, in accordance with the warranty regulations described below. If the product shows any defects within the specified warranty period that are not excluded from this warranty as described under § 5, BEHRINGER shall, at its discretion, either replace or repair the product using suitable new or reconditioned parts. In the case that other parts are used which constitute an improvement, BEHRINGER may, at its discretion, charge the customer for the additional cost of these parts.

2. If the warranty claim proves to be justified, the product will be returned to the user freight prepaid.

3. Warranty claims other than those indicated above are expressly excluded.

1. To obtain warranty service, the buyer (or his authorized dealer) must call BEHRINGER (see enclosed list) during normal business hours returning the product. All inquiries must be accompanied by a description of the problem. BEHRINGER will then issue a return authorization number.

2. Subsequently, the product must be returned in its original shipping carton, together with the return authorization number to the address indicated by BEHRINGER.

3. Shipments without freight prepaid will not be accepted.

1. Warranty services will be furnished only if the product is accompanied by a copy of the original retail dealer's invoice. Any product deemed eligible for repair or replacement under the terms of this warranty will be repaired or replaced.

2. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country for which

the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in materials or workmanship. The warranty does not cover any such modification/adaptation, irrespective of whether it was carried out properly or not. Under the terms of this warranty, BEHRINGER shall not be held responsible for any cost resulting from such a modification/adaptation.

3. Free inspections and maintenance/repair work are expressly excluded from this warranty, in particular, if caused by improper handling of the product by the user. This also applies to defects caused by normal wear and tear, in particular, of faders, crossfaders, potentiometers, keys/buttons, tubes, guitar strings, illuminants and similar parts.

4. Damages/defects caused by the following conditions are not covered by this warranty:

▲ improper handling, neglect or failure to operate the unit in compliance with the instructions given in BEHRINGER user or service manuals.

▲ connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used.

▲ damages/defects caused by force majeure or any other condition that is beyond the control of BEHRINGER.

5. Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the warranty.

6. If an inspection of the product by BEHRINGER shows that the defect in question is not covered by the warranty, the inspection costs are payable by the customer.

7. Products which do not meet the terms of this warranty will be repaired exclusively at the buyer's expense. BEHRINGER will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 6 weeks after notification, BEHRINGER will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.

This warranty is extended exclusively to the original buyer (customer of retail dealer) and is not transferable to anyone who may subsequently purchase this product. No other person (retail dealer, etc.) shall be entitled to give any warranty promise on behalf of BEHRINGER.

Failure of BEHRINGER to provide proper warranty service shall not entitle the buyer to claim (consequential) damages. In no event shall the liability of BEHRINGER exceed the invoiced value of the product.

* Customers in the European Union please contact BEHRINGER Germany Support for further details.

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